

522,972
10/522972

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/015379 A2

(51) International Patent Classification⁷:

G01J

(74) Agent: PERSLEY, Sidney; 222 Bridge Plaza South, Fort Lee, NJ 07024 (US).

(21) International Application Number:

PCT/US2003/025137

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:

8 August 2003 (08.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/401,957 8 August 2002 (08.08.2002) US

(71) Applicant (for all designated States except US): SUN CHEMICAL CORPORATION [US/US]; 322 Bridge Plaza South, Fort Lee, NJ 07024 (US).

(71) Applicants and

(72) Inventors: SPRYCHA, Ryszard [US/US]; 2 Hillside Terrace, Wallington, NJ 07057 (US). SMITH, Doreen, E. [US/US]; 121 Chestnut Street, Belleville, NJ 07109 (US). BIRO, David [US/US]; 42 Cayuga Avenue, Rochaway, NJ 07866 (US). PARRIS, Juanita [US/US]; 23 Stemler Drive, Cliftonwood, NJ 07221 (US). LAKSIN, Mikhail [US/US]; 2278 Redwood Road, Scotch Plains, NJ 07072 (US). PACE, Gregory [US/US]; 50 Lincoln Avenue, Wood Ridge, NJ 07075 (US).

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/015379 A2

(54) Title: APPARATUS AND METHOD FOR QUANTITATIVELY MEASURING LIQUID FILM DRYING RATES ON SUBSTRATES

(57) Abstract: An apparatus and method for measuring the drying rate of a liquid or liquid film in air or other gaseous media by either: a) measuring changes in the print density of the liquid; b) measuring changes in the dynamic surface tension of the liquid; c) measuring the differential pressure between an inert gas required to displace a sample of the liquid drawn into a capillary tube from a reservoir of the liquid and the pressure required for a bubble of the gas to form in the reservoir; and d) measuring the electrical conductance or resistance of the liquid.